



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,807	07/28/2006	Yukio Miyata	JFE-06-1181	5332

35811 7590 11/25/2009
IP GROUP OF DLA PIPER LLP (US)
ONE LIBERTY PLACE
1650 MARKET ST, SUITE 4900
PHILADELPHIA, PA 19103

EXAMINER

SHEVIN, MARK L

ART UNIT	PAPER NUMBER
----------	--------------

1793

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

11/25/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto.phil@dlapiper.com

Office Action Summary	Application No. 10/587,807	Applicant(s) MIYATA ET AL.	
	Examiner MARK L. SHEVIN	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5, 7-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7-10, and 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 2-5, 7-10, and 12-20, filed August 18th, 2009, are currently under examination. Claims 1, 6, and 11 are canceled and claims 2-5, 7-10, and 12-20 are amended.

Status of Previous Rejections

2. The previous rejections of claims 6-10 and 16-20 under 35 U.S.C. 112, first paragraph in the Office action dated March 25th, 2009 are withdrawn in view of the amendments to these claims.

3. The previous rejections of claims 1-20 under 35 U.S.C. 103(a) over **Kimura** (US 5,985,209) in the Office action dated March 25th, 2009 are maintained.

4. The previous rejections of claims 1-20 under 35 U.S.C. 103(a) over **Miyata** (US 6,464,802) in the Office action dated March 25th, 2009 are withdrawn in view of the amendments to claims 2 and 4.

5. The previous rejections of claims 1-20 on the ground of nonstatutory obviousness-type double patenting over **Kimura** (US 5,985,209) in the Office action dated March 25th, 2009 are withdrawn in view of the amendments to claims 2 and 4.

6. The previous rejections of claims 1-20 on the ground of nonstatutory obviousness-type double patenting over **Miyata** (US 6,464,802) in the Office action dated March 25th, 2009 are withdrawn in view of the amendments to claims 2 and 4.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claim 16** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 is dependent on canceled claim 6, thus making the limitations of claim 16 (what claim 16 is limiting) indefinite. For the purpose of examining the instant claims, claim 16 is interpreted as being dependent on independent claim 2.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

8. **Claims 2-5, 7-10, and 12-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kimura** (US 5,985,209).

Kimura:

Kimura discloses (col. 2, lines 35-55) a martensitic stainless steel for a line pipe with the composition as shown in the comparative table above. Steel of Kimura's disclosed composition may be formed into seamless pipe or welded pipe such as electric resistance welded steel pipe, UOE steel pipe, or spiral steel pipe (col. 5, lines 35-41). Line pipe implicitly has a heat-affected zone formed during welding. Lastly, the steel pipes of Kimura's invention are designed to undergo girth welding, to implicitly join

Art Unit: 1793

pipes together into a welded structure for transferring oil and natural gas (col. 8, lines 32-44).

Element	Instant	Kimura	Overlap
C	0 – 0.01	0 – 0.02	0 – 0.01
N	0 – 0.01	0 – 0.07	0 – 0.01
Cr	10 - 14	10 – 14	10 - 14
Ni	4 - 7	0.2 – 7.0	4 – 7
Si	0.05 – 1.0	0 – 0.5	0.05 – 0.5
Mn	0.1 – 2.0	0.2 – 3.0	0.2 – 2.0
P	0 – 0.3	0 – 0.05	0 – 0.05
S	0 – 0.01	0 – 0.005	0 – 0.005
Al	0.001 – 0.10	0 – 0.1	0.001 – 0.1
Cu	0 – 4	0 – 2.0	0 – 2.0
Co	0 – 4	n/a	n/a
Mo	0 – 4	0.2 – 5.0	0.2 – 4
W	0 – 4	n/a	n/a
Ti	0 – 0.15	0 – 0.15	0 – 0.15
Nb	0 – 0.10	0 - 0.25	0 – 0.10
V	0 – 0.10	0 – 0.20	0 – 0.10
Zr	0 – 0.10	0 – 0.15	0 – 0.10
Hf	0 – 0.20	n/a	n/a
Ta	0 – 0.20	0 – 0.15	0 – 0.15
Ca	0 – 0.010	0 – 0.006	0 – 0.006
Mg	0 – 0.010	n/a	n/a
REM	0 – 0.010	n/a	n/a
B	0 – 0.01	n/a	n/a
Fe	Balance	Balance	Balance

Regarding claims 2-5, It would have been obvious to one of ordinary skill in stainless steel pipe, at the time of the invention, to select any portion of the claimed ranges, including the claimed ranges, from the overlapping ranges disclosed in Kimura because Kimura finds that the prior art composition in the entire disclosed ranges has a

Art Unit: 1793

suitable utility and the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages."); *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969). From MPEP § 2144.05: In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). In addition, "[A] prior art reference that discloses a range encompassing a somewhat narrower claimed range is sufficient to establish a prima facie case of obviousness." *In re Peterson*, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003). Also see, *In re Geisler* 43 USPQ 2d 1365 (Fed. Cir. 1997) and *In re Malagari*, 182 USPQ 549, 554 (CCPA 1974).

With respect to the amendment to claims 2-5 adding that the pipe is "seamless", Kimura taught that his martensitic stainless steel pipes may be seamless (col. 3, lines 10-15 and col. 5, lines 35-41).

With respect to the amendment to claims 2 and 4 adding "wherein the content Csol defined...on a mass basis", it is well settled that there is no invention in the discovery of a general formula if it covers a composition described in the prior art, *In re Cooper and Foley* 1943 C.D. 357,553 O.G. 177., 57 USPQ 1 17, *Taklatwalla v. Marburg*, 620 O.G. 685, 1949 C.D. 77, and *In re Pilling*, 403 O.G. 513, 44 F(2) 878, 1931 C.D. 75. In absence of evidence to the contrary, the selection of the proportions of elements would appear to require no more than routine investigation by those ordinary

Art Unit: 1793

skilled in the art. In re Austin, et al. 149 USPQ 685,688. It would have been obvious to one of ordinary skill in the art to select alloy compositions fulfilling the claimed compositional relationships from the alloy compositional ranges disclosed by Kimura.

Regarding claim 7-10, it would have been obvious to one of ordinary skill in the stainless steel pipe, at the time of the invention, to form a seamless martensitic stainless steel line pipe with the claimed alloying elements in the claimed ranges as Kimura discloses a martensitic stainless steel for line pipe (Abstract, col. 2, lines 5-10, and claim 1) with overlapping ranges of the claimed alloying elements as discussed in the rejections of claims 2-5, *supra*.

Regarding claims 12-20, it would have been obvious to one of ordinary skill in stainless steel pipe, at the time of the invention, to form a welded structure or a welded structure further welded to a member as the steel pipes of Kimura's invention are designed to undergo girth welding, to implicitly join pipes together into a welded structure for transferring oil and natural gas (col. 8, lines 32-44) and one of ordinary skill would have welded pipes together to form such a pipeline for transporting oil and/or natural gas from Kimura. Line pipes are a welded structure and they are implicitly welded together by girth welding to form pipeline for oil/natural gas transport.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

Art Unit: 1793

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 2-5, 7-10, and 12-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 and 12-16 filed September 16th, 2009 of copending Application No. 12/416,996 (US '996).

This rejection is timely in this final rejection as co-pending application 12-416,996 was filed after that mailing date of the previous Office Action and thus the present claims could not have been rejected earlier on this ground.

Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons:

US '996:

US '996 recites (claims 1-4) a corrosion-resistant martensitic stainless steel pipe for oil country tubular goods (martensitic because it is majority martensite per claim 2). Claim 12 further recites a method of making such a pipe and that the pipe is seamless.

Art Unit: 1793

Claims 1-4 and 12-16 recite the content of alloying additions as shown in the

Element	Instant	US '996	Overlap
C	0 – 0.01	0 – 0.05	0 – 0.01
N	0 – 0.01	0.01 – 0.15	0.01
Cr	10 - 14	14 - 18	14
Ni	4 - 7	5 - 8	5 – 7
Si	0.05 – 1.0	0 – 0.50	0.05 – 0.50
Mn	0.1 – 2.0	0.20 – 1.80	0.20 – 1.80
P	0 – 0.3	0 – 0.03	0 – 0.03
S	0 – 0.01	0 – 0.005	0 – 0.005
Al	0.001 – 0.10	0 – 0.05	0.001 – 0.05
Cu	0 – 4	0.5 – 3.5	0.5 – 3.5
Co	0 – 4	n/a	n/a
Mo	0 – 4	1.5 – 3.5	1.5 – 3.5
W	0 – 4	0 - 3	0 – 3
Ti	0 – 0.15	0 – 0.30	0 – 0.15
Nb	0 – 0.10	0 – 0.20	0 – 0.10
V	0 – 0.10	0.03 – 0.20	0.03 – 0.10
Zr	0 – 0.10	0 – 0.20	0 – 0.10
Hf	0 – 0.20	n/a	n/a
Ta	0 – 0.20	n/a	n/a
Ca	0 – 0.010	0.0005 – 0.01	0.0005 – 0.01
Mg	0 – 0.010	n/a	n/a
REM	0 – 0.010	n/a	n/a
B	0 – 0.01	0 – 0.01	0 – 0.01
Fe	Balance	Balance	Balance

comparative table below:

Regarding claims 2-5, these claims are rejected for the same reasons as stated in the rejection of claim 2-5 over Kimura, *supra*, see MPEP 2144.05.

Regarding claims 7-10, it would have been obvious to one of ordinary skill in the stainless steel pipe, at the time of the invention, to form a seamless martensitic stainless steel line pipe with the claimed alloying elements in the claimed ranges as US

Art Unit: 1793

'996 discloses a martensitic stainless steel seamless pipe for oil country tubular goods which suggests the use of such a pipe to transport oil, hence motivation for producing a line pipe.

Regarding claims 12-20, it would have been obvious to one of ordinary skill in stainless steel pipe, at the time of the invention, to form a welded structure or a welded structure further welded to a member as the steel pipes of US '996 are implicitly designed to be welded into line pipe to thus transport oil.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Applicant's Arguments:

10. Applicant's arguments filed August 18th, 2009 have been fully considered but they are not persuasive.

Applicants assert (p. 12, para 5 to p. 14, para 3) that Kimura does not disclose the content of soluble carbon, C_{sol} , as being equal to or less than 0.0050% and that there is no such appreciation for this claimed aspect.

In response, Applicants do not contest the fact that Kimura discloses overlapping ranges of C, N, Cr, Ni, Si, Mn, P, S, Al, Cu, Mo, Ti, Nb, V, Zr, Ta, Ca, and Fe and has not shown any evidence such as criticality, a teaching away, unexpected results, etc that would present "evidence to the contrary" as discussed in the rejection of claims 2-5 on p. 5, supra. The obviousness of the claimed C_{sol} range does not depend on an inherency argument but more simply a reasonable expectation of success in that if the

Art Unit: 1793

claims variables comprising the formula are overlapped by the prior art, then the equation would be satisfied by an optimization of ranges in the course of routine experimentation per MPEP 2144.05. Furthermore, "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Applicants' remarks (p. 14, para 4 to p. 16, para 2) regarding the previous rejections over Miyata and Suzuki are moot in view of the withdrawal of these rejections.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

-- Claims 2-5, 7-10, and 12-20 are finally rejected
-- No claims are allowed

Art Unit: 1793

The rejections above rely on the references for all the teachings expressed in the texts of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the texts of the references. To emphasize certain aspects of the prior art, only specific portions of the texts have been pointed out. Each reference as a whole should be reviewed in responding to the rejection, since other sections of the same reference and/or various combinations of the cited references may be relied on in future rejections in view of amendments.

All recited limitations in the instant claims have been met by the rejections as set forth above. Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121; 37 C.F.R. Part §41.37 (c)(1)(v); MPEP §714.02; and MPEP §2411.01(B).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark L. Shevin whose telephone number is (571) 270-3588 and fax number is (571) 270-4588. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy M. King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Mark L. Shevin/
Examiner, Art Unit 1793

November 9th, 2009
10-587,807

/George Wyszomierski/
Primary Examiner
Art Unit 1793